DOCUMENT RESUME

ED 316 953 EA 021 768

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TITLE Pennsylvania: The State and Its Educational System.
INSTITUTION Institute for Educational Leadership, Washington, D.C.
REPORT NO ISBN-0-937846-72-4
PUB DATE Nov 88
NOTE 21p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Economic Climate; Economic Development; Educational Demand; Educational Trends; Elementary Secondary Education; *Enrollment Influences; Enrollment Trends; *Minority Group Children; Minority Groups; School Demography; School Holding Power; School Statistics; Urban Environment
IDENTIFIERS *Pennsylvania

ABSTRACT

It is easy to perceive Pennsylvania as a state in decline, but that would be a big mistake. While its population total has dropped from fourth largest in 1980 to fifth largest in 1987, Pennsylvania is still one of the 10 states in the nation that contain half of the country's residents. The state's two major metropolitan areas, Pittsburgh and Philadelphia, seem to have "bottomed out" in terms of manufacturing job losses and unemployment rates. Approximately 79 percent of the students in Pittsburgh's schools are thought to be below the poverty line. Pennsylvania's schools, however, do extremely well in retaining youth to high school graduation. Although total enrollments are going down, an increase has turned up in the early grades of school that will work its way up through the system. Higher education in Pennsylvania is marked by richness and diversity, both in public and in private institutions. One problem, though, is the small number of minorities--as well as Caucasians--who go on to higher education. In general, Pennsylvania education is doing a number of things right. Investments in the system have been high, and--except for minorities--the investments seem to pay off. (22 references) (KM)

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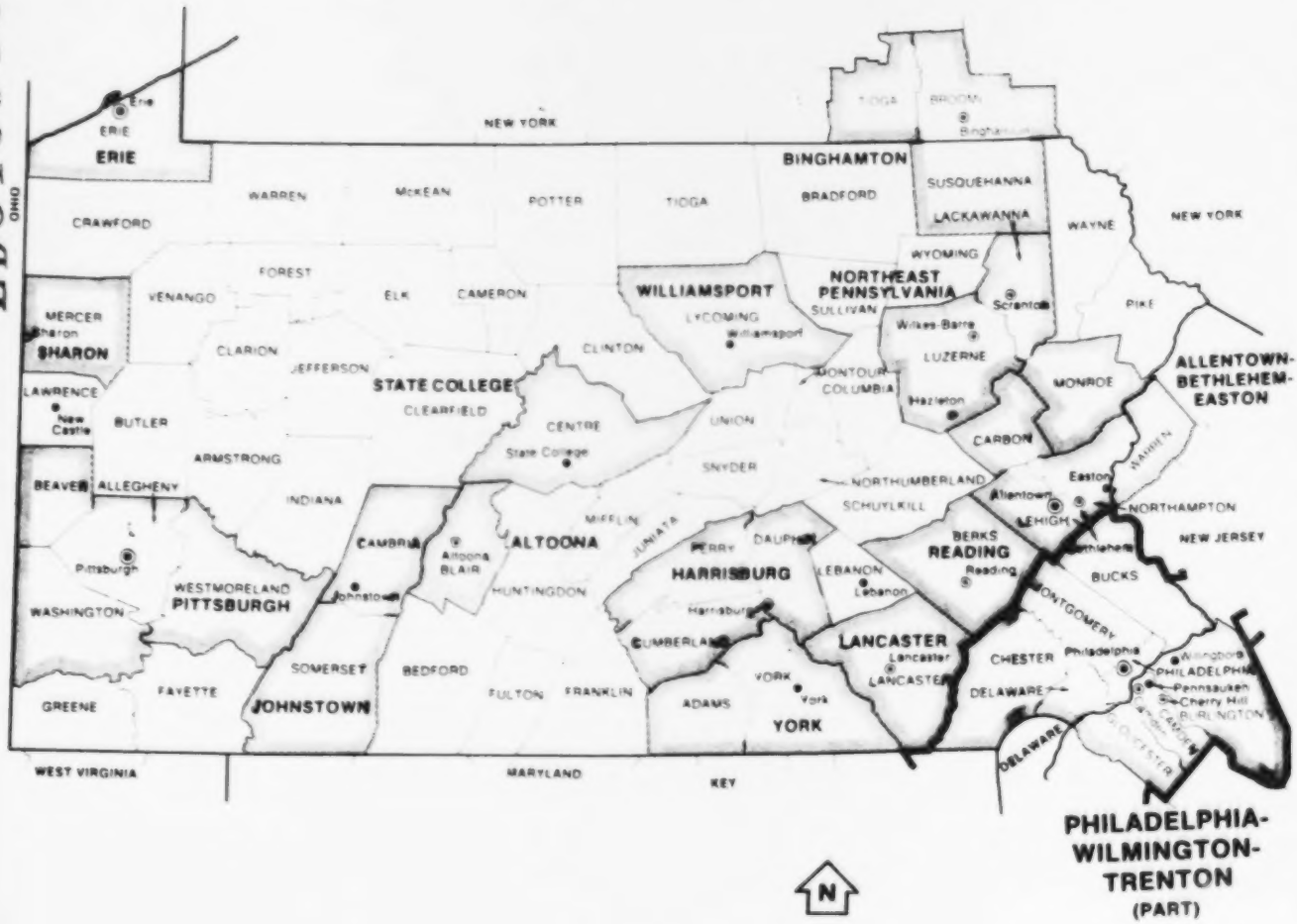

THE STATE AND ITS EDUCATIONAL SYSTEM

BY HAROLD L. HODGKINSON

EA 021 768

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ACKNOWLEDGMENTS

Particular thanks go to Linda Croushore, Executive Director of the Mon Valley Education Consortium, to Gordon De Jong of the Population Issues Research Center at Penn State, Thomas La Belle and Christopher Ward of the University of Pittsburgh, and to Thomas K. Gilhool, Secretary of the Pennsylvania Department of Education, for providing information and advice on the project.

The author is indebted to David Bergholz, formerly President, Public Education Fund, now once again with the Allegheny Conference on Community Development, The H.C. Frick Educational Commission, The Howard Heinz Endowment and Kenneth Reeher, Executive Director of the Pennsylvania Higher Education Assistance Corporation, for making this double report possible.

Finally, Kenneth Mortimer, who served Penn State for many years, has been a constant source of information about the complexities of Pennsylvania.

The selection of information and its interpretation remain the responsibility of the author.

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November, 1988

ISBN 0-937846-72-4
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The Institute for Educational Leadership, Inc.
1001 Connecticut Ave. N.W.
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Washington, D.C. 20036
Cover and Graphics Design: Tony Browder, East Koast Graphics, Inc.

COVER NOTE:

This "people map" of Pennsylvania shows some very interesting things. First, there are no perfectly square counties in the state, whereas almost all of Iowa's are. This tells you a lot about geography as well as human organizations. Second, Philadelphia, the largest metro area in the state, is actually a part of a much larger "city" which is called Philadelphia-Wilmington-Trenton. It is a working reality, even if it crosses state lines. And in the western part of the state, Pittsburgh is actually a part of a larger unit called "Cleveburgh," which extends into Ohio (see text). These "people maps" are increasingly used by planners, marketers of goods and services, and even educators!

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PENNSYLVANIA:
THE STATE AND ITS EDUCATIONAL SYSTEM

HAROLD L. HODGKINSON
Director
Center for Demographic Policy
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PENNSYLVANIA AND THE "MON VALLEY"—THE STATE AND ITS EDUCATIONAL SYSTEM

This report will concentrate on Pennsylvania first, then develop a specific focus on Pittsburgh and the Monongahela Valley, using the former discussion to inform the latter. The objective is not to evaluate the state's educational system but to establish the demographic context in which it operates.

It is easy to see Pennsylvania as a state in decline, but it would be a big mistake. True, its population total has dropped from fourth largest in the 1980 Census (11,863,000) to fifth largest in 1987 (11,936,000). However, it is still one of the ten states in the U.S. that contain *half* of the population of the country, while 40 states quarrel over the other half. Its importance in the American economy, even with the recent conversion of steel and manufacturing jobs, is massive. In addition, some of these changes have resulted in a higher quality of life, assuming that clean air is part of the picture. As of May, 1988, the ten cities with the worst air quality included Spokane, Albuquerque, Las Vegas, Denver, Phoenix and Fairbanks, while the cities with the *best* air included Cleveland, Boston, San Jose, Detroit and Pittsburgh! (EPA violations for carbon monoxide.) It is amusing to realize that physicians are still recommending that their respiratory patients move to Phoenix, Denver and Albuquerque for the wonderful air.

The air indicator is significant in pointing out that the "rust bowl" transformation is now almost completed. Flying into Pittsburgh today is one of the few aesthetic experiences left. Glistening, clean rivers surround tall skyscrapers and green parks. Downtown Philadelphia has achieved some similar transformations. A drive through Lancaster, Hershey or Harrisburg suggests prosperity and activity. Pennsylvania *looks* good today. Under the surface can be found some endemic problems (the small number of new business starts, a major source of new job growth; the number of well-paid steelworkers who are either unemployed or working at welfare-wage jobs at the bottom of the service industries; the lingering doubts about Three Mile Island; the rapidly aging population; etc.).

Americans forget the root cause of many of these current problems. After World War II, much of the world's steel making and manufacturing capacity (Germany, England, Japan, Russia) had been bombed out. Our Marshall Plan helped many nations rebuild (and therefore modernize) steel and manufacturing facilities, while we in the U.S. continued to use our undamaged but aging plants that had been constructed in the Twenties and Thirties, which contributed to our amazing economic growth after World War II. But by the Seventies, time had caught up with us, forcing America to do what most other nations had done decades earlier—retool. Michigan and Pennsylvania are prime examples of how hard it is to rebuild while competing with other nations who have already modernized. Had the U.S. lost its heavy industry during the War, we would not be in our present situation, but we would not have had the vital postwar economic explosion that allowed America to dominate the world economy. (The Baby Boom—70 million people born between 1946 and 1964—both helped to produce this economic bonanza and thrived on it as well.)

Pennsylvania's two major metro areas, Pittsburgh and Philadelphia, including about 7 million of the state's 11 million total, seem to have "bottomed out" in terms of manufacturing job losses and unemployment rates. Both are high in corporate headquarters, air, water and road transportation systems, excellent higher education facilities and improving public schools, strong linkage organizations across public and private sectors, financial services and international potential. On the other hand, populations are not increasing in either metro. There are real shortages of persons in their mid-thirties who have small children and will move into peak earning years, and the economies are still substituting low-paying service jobs for well-paying steel and manufacturing jobs. Both metro areas have many rich and poor, and not enough in the middle, as well as high personal and corporate taxes.

Fortunately for Pennsylvania, there is enough diversification outside of these two metro areas to offset some of the losses. Let's now look at the state itself, comparing it with the nation when possible.

The profile on the following page shows very clearly a state with great population stability. Because of the lack of movement in and out, today's Pennsylvania youth *will* become tomorrow's Pennsylvania adults! Because of this lack of in-migration, the population is steadily aging, right behind Florida in its percentage of senior citizens and

A PENNSYLVANIA PROFILE

			U.S.
Population, 1980	11,863,000	4th	226,545,805
Population, 1987	11,936,000	5th	243,400,000
Population Growth, 1980-87	+0.6%	46th	+7.4%
People Per Square Mile	266	8th	69
Black Population, 1980	1,048,000	11th	26,495,000
Hispanic Population, 1980	153,000	11th	14,608,000
Persons under Age 18	24%	46th	26%
Persons over Age 65	14.6%	2nd	12.1%
Metro Residents	84.6%	9th	76.6%
Birth Rate per 1,000 Women	13.5	48th	15.8
Births to Teenage Mothers	11.5%	27th	12.7%
Unwanted Births per 1,000	22.8	15th	22.0
Divorces per 1,000 Marriages	356	42nd	490
Born in Another State	19.6%	30th	30.2%
Crime Rate per 100,000	3,102	46th	5,450
Social Security Recipients	182 per 1,000	4th	152
Home Sales, 1985-86	+22.5%	5th	+11.6%
Working Women, 1980	45.6%	44th	49%
Personal Income Per Capita	$14,249	21st	$14,641
Adults, High School Graduates, 1980	64.7%	36th	66.5%
Adults, College Graduates, 1980	13.6%	43rd	16.2%

social security payouts as well as a very low fertility rate. Aging populations also have lower rates of crime and divorce, and many women who are too old to be counted in the work force. (Given all this, the per capita personal income is not as low as one might expect.)

What the state is short on is: (1) babies and (2) young married couples who will produce (1). A major concern here is the fact that about one child in five is born out of wedlock. Given the fact of a small proportion of kids in the state, every one has to become a winner, which seldom happens to children born outside of marriage. (However, this is a *national* issue, as Pennsylvania is about at the U.S. mean on children born to unwed parents.) Although Pennsylvania is a partially rural state, about 85 percent of its people live in metro areas, making it the 11th most urban state. It provides excellent health numbers, with 219 doctors per 100,000, ranking 12th, 634 hospital beds per 100,000 population, ranking 12th, and 9th in occupancy rate per bed. Unfortunately, *cost* is also involved—the average room charge in 1987 was $294 a day, ranking 4th in cost. Ability to pay can become a health issue for those working the "low end" minimum wage jobs in the service sector as well as those manufacturing workers whose health benefits have run out after lay-offs.

One of the facts of economic life these days is the necessity of having *two* incomes per family in order to live a middle-class life. Pennsylvania has a small percentage of its females in the work force, due partially to its aging population and to the idea that men work outside the home while women raise children. In addition, the Pennsylvania adult population is not very well-educated, which creates a problem for generating new, well-paying jobs that require new skills and knowledge. The recent increases in home sales may mean that economic improvement is occurring. Certainly the geographic stability of people in Pennsylvania is admirable, even though as the population ages, there will have to be younger families moving in to have children and begin work at lower wage levels, assuming they will work their way up.

Pennsylvania can also be thankful for its low crime rate. It's hard to realize how expensive a prisoner *is*, in terms of tax support. A child in school or a state college student each costs taxpayers about $3,500 while a prisoner costs $22,000 per year. (Last year, this author had the opportunity of telling several Pennsylvania audiences that it is eight times as expensive to have someone in the state pen as it is to have someone at Penn State!) What kind of educational system could we have if we could spend $22,000 on every student every year? Given the fact that the U.S. doubled the number of prisoners in the last decade while declining 10% in public school students, it is clear that our new investments in prisons will likely outpace our increases in education funding in the years to come. Pennsylvania's prison population increased 86% from 1980 to 1985, ranking 12th in terms of increase, while Pennsylvania's schools declined by 11%. And in that eighty percent of America's prisoners are high school dropouts, there are sound, pragmatic reasons for making sure that young people graduate from high school!

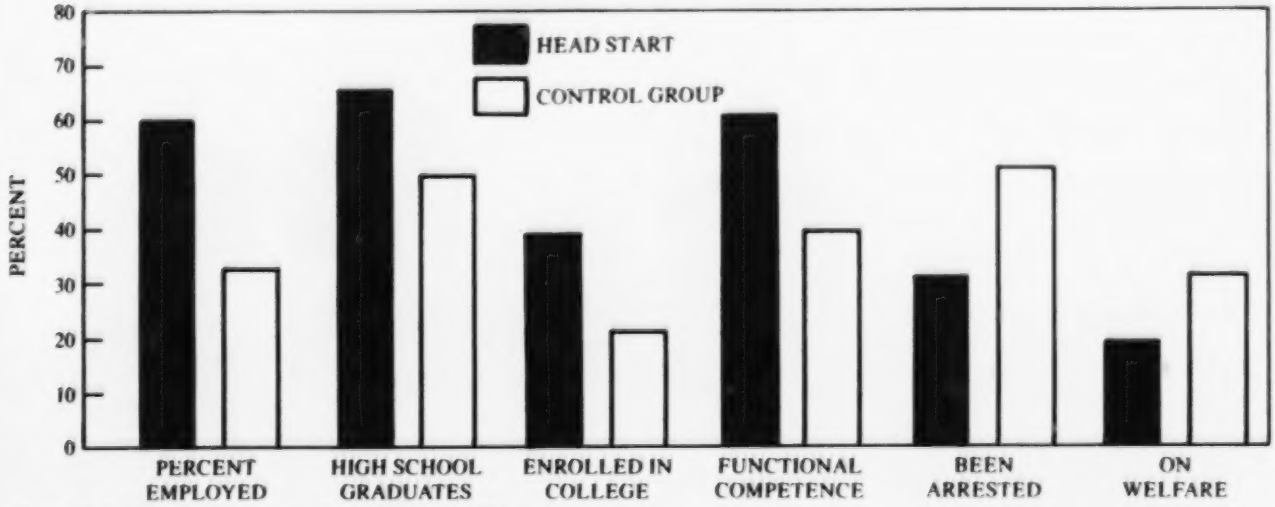
We are beginning to learn that certain programs for very young children have a remarkable ability to change people's lives for the better, in terms of increasing education, getting jobs and staying out of trouble (See chart below).

It is clear that in investment in Head Start saves about $7 in later services that do not need to be provided for every dollar invested. At the higher education level, students who have participated in Upward Bound programs have a *four times* greater chance of graduating from college than students who have not participated. In the Sixties, those who favored early childhood programs and efforts to increase the pool of minority college graduates were called liberals. Today they are called pragmatists. Given that today's Pennsylvania youth will be tomorrow's Pennsylvania adults, it seems clear that it is to the *state's* advantage to ensure maximal educational benefits for every student. No one benefits by having any young person drop out of school in Pennsylvania.

Pennsylvania must pay even more attention to the state's job and business structures in the years ahead if it is to move ahead. The table on page four indicates the number and percentage of workers in that area, and second the contribution of that area to the Pennsylvania economy, with the national average for each area fixed at 100.

Between 1980, when these numbers were taken and 1986, Pennsylvania's work force in manufacturing has declined 21 percent (the U.S. decline was 6.4 percent), and service jobs increased 25 percent versus 26.1 percent for the nation. While the nation was adding 10,294,000 new jobs, Pennsylvania added 239,000 jobs from 1980—1986 ranking 11th which was good for a state in mid-recovery. However, we need to know how many of these 239,000 new jobs were paying $3.90 an hour. At the moment, that information is not available. However, we do have some information on the current work force as shown on page four.

HEAD START CHILDREN AT AGE 19



From High/Scope Foundation, Ypsilanti, Michigan, 1984

PENNSYLVANIA'S JOBS AND BUSINESSES

	NUMBER	% WORKERS	INDEX
AGRICULTURE FORESTRY, MINES, FISHING	136,117	2.7%	68
CONSTRUCTION	240,162	4.8%	81
MANUFACTURING	1,420,83	28.6%	128
TRANSPORTATION, COMMUNICATION	347,197	7.0%	96
RETAIL, WHOLESALE, TRADE	972,676	19.6%	96
FINANCE, INSURANCE, REAL ESTATE	256,725	5.2%	87
BUSINESS, REPAIR, PERSONAL SERVICE	348,085	7.1%	85
PROFESSIONAL SERVICES	1,011,813	20.3%	100
PUBLIC ADMINISTRATION	227,939	4.6%	87

Who Does What in Pennsylvania?

Finance Managers	19,900
Engineers, total	68,000
Physicians	23,600
Lawyers	21,100
Computer programmers	15,600
* * * *	
Secretaries	204,200
Fast food workers	231,400
Janitors	141,300
Guards	35,700

(*Occupational Outlook Quarterly*, Winter, 1986)

What is clear is that the state is not well-developed in the well-paying "high end" of the service sector—finance, insurance, real estate, business services, technical services and computer services. Jobs in this arena have been gaining, but the state is so big, *many* new jobs in the sector will have to be created. Although this is a guess, Pennsylvania is probably about even with the nation—for every new job we create for a computer programmer, we create nine new jobs for cashiers in the U.S. Percentage of job growth favors "high tech" jobs, but this is not the area in which most new jobs will be, as the chart on page five shows.

It is also hard to believe that many steel workers have been retrained for these well-paying technical service jobs that require considerable training and retraining. More likely is the $18 per hour steelworker becoming the $5 per hour clerk. Additionally, the youth demographics in the state mean an increasingly smaller number of entry-level workers with high school diplomas in the decade to come. It is likely that jobs will be looking for people while people will be looking for jobs. It is clear that the educational system will be vital in Pennsylvania's future, so let's focus on it.

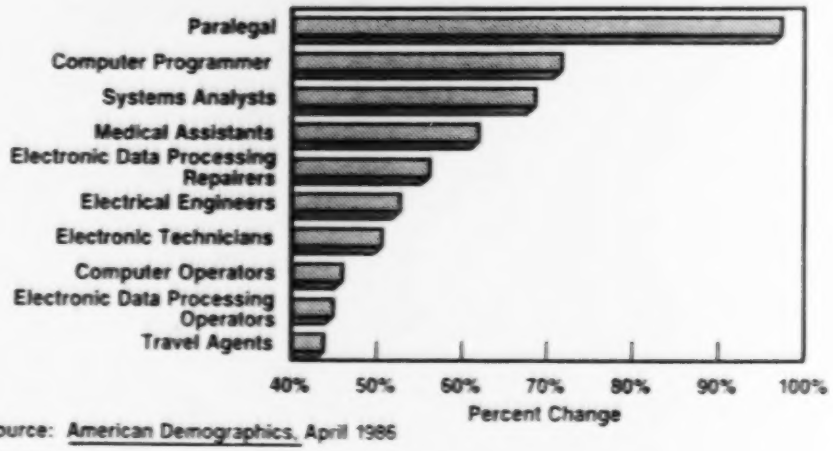
PENNSYLVANIA'S EDUCATIONAL SYSTEM

The numbers on page six should help give us a sense of the Pennsylvania schools.

The thing that stands out from the numbers is the continuing history of enrollment decline in Pennsylvania. From 1970 to 1982, while the nation was losing 13.6 percent, Pennsylvania lost 24.5 percent. From 1980 to 1985, the nation was tapering off with only a 3.6 percent loss in school enrollments while Pennsylvania was still losing 11.8 percent. Only Massachusetts and Connecticut had heavier 1980-85 declines. By the 1987-88 school year, national enrollments were showing steady growth in early elementary students, as a result of the "Baby Boomlet"

FASTEST GROWING JOBS IN TECHNICAL AREAS

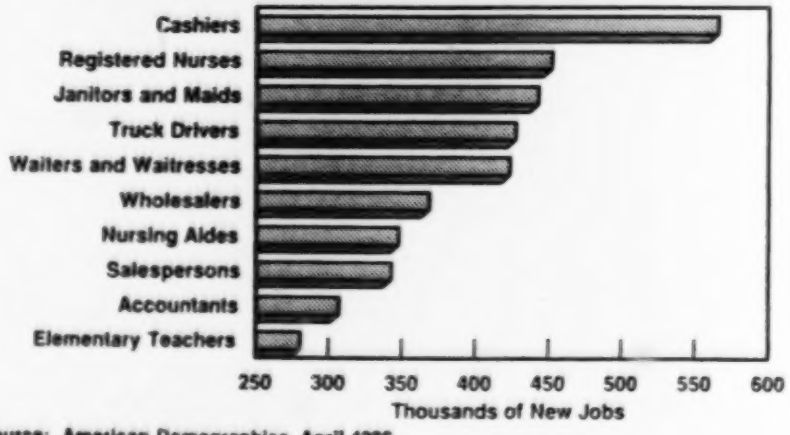
(Fastest Relative Growth, 1985 to 1995)



Source: American Demographics, April 1986

MOST NEW JOBS IN TRADITIONAL OCCUPATIONS

(Fastest Absolute Growth, 1985 to 1995)



Source: American Demographics, April 1986

PENNSYLVANIA SCHOOL PROFILE

	1978-79	1983-84	1987-88
Elementary Enrollment	1,008,664	846,145	874,784
Secondary Enrollment	1,038,082	891,807	795,758
Total Enrollment	2,046,746	1,838,952	1,668,542
Per Pupil Expenditures, 1973-74	$1,315		U.S. $1,147
Per Pupil Expenditures, 1985-86	$4,235		U.S. $3,677
Teacher Salary, 1973-74	$11,618		U.S. $11,690
Teacher Salary, 1985-86	$26,009		U.S. $25,257
School Funding	1973-74		1986-87
Federal	7.7%		4.3%
State	48.5%		45.7%
Local	43.8%		50.0%
Private School Enrollment, 1980	402,058		
Catholic	314,367		
Other private	87,691		
Percent of 1978 9th Graders Graduating 1982	76%		16th
Percent of 1982 9th Graders Graduating 1986	78.5%		14th
Per capita income, 1986	$14,249		22nd
Children in Poverty ages 5-17, 1980	13.2%		28th (U.S. 15.3%)
Pupil-Teacher Ratio, 1982	17.3:1		19th—U.S. 18.9:1
Pupil-Teacher Ratio, 1987	16.3:1		19th—U.S. 17.8:1
Handicapped Students, 1987	12.1%		13th—U.S. 11.0
Gifted Students, 1985	3.3%		U.S. 3.2%
Bilingual Students, 1984	0.5%		U.S. 3.0%
Minority Students, 1987	16.0%		30th—U.S. 30%
SAT Score, 1987 (caution)	891		15th (U.S. 906)
Percent Scoring over 600	16.5% verbal 14.8% math		17th

while Pennsylvania was just beginning to show elementary enrollment growth.

It is not commonly known that three quarters of the "Boomlet" is in only five states—California, Texas, Arizona, Florida and North Carolina, all states in which minority enrollments are above the national averages. While the national youth decline was heavily white, the "Boomlet" now pushing its way through the schools, is ethnically diverse, leading to steadily increasing minority percentages in schools, then—hopefully—in colleges and then entry-level workers. Pennsylvania elementary enrollments are showing the same trend, but much more gradually than the nation as a whole. Minority populations are quite low, especially in comparison to New York (35.6% minority students) and New Jersey

(30.3%). But the population decline in Pennsylvania's schools was very steep, and will take some time to point upward, as elementary school enrollments work their way through (See chart below).

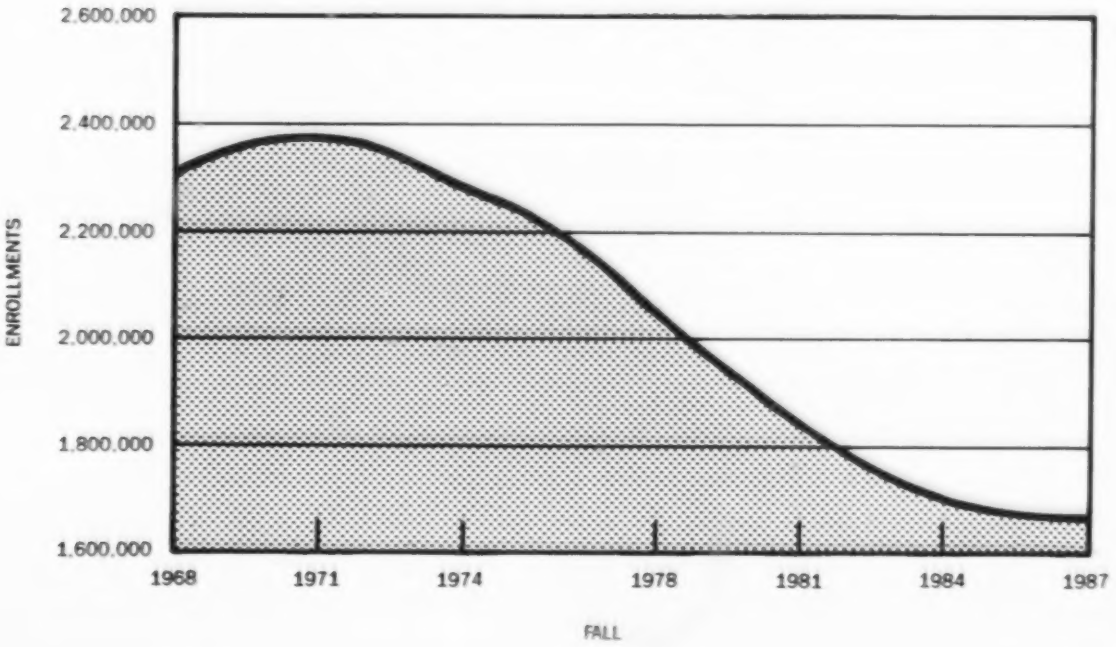
States with severe enrollment declines can look good on many measures just by standing still. For example, if you level fund school budgets but the number of kids drops by 20 percent, your expenditures per pupil will show a marked increase. Because we do not reduce budgets or fire teachers as rapidly as enrollment declines hit, you can also get smaller classes, still a highly desirable state of affairs. In addition, one can often "tune up" the quality of the teaching force by making very careful replacement appointments when teachers retire or move, etc. Thus, ironically, periods of enrollment declines can be periods in which states can *improve* their educational performance on some measures.

Pennsylvania is one such state. However, its very high retention rate through high school graduation borders on the amazing, especially when compared again with New York (45th). New Jersey, however, also does well, ranking 16th. Ohio, another big urban state, ranks 11th in the most recent years. Why do some big, urban states do so well on high school completions, while other states, like New York, California, Florida and Texas remain in the bottom ten? In many ways, New York is a premier state in terms of dedication to public education, yet this one crucial outcome—retention—has eluded it. One component of the argument is that in states like Ohio and Pennsylvania, a high school degree *was* needed to get a good job in the factory or mill, but college was not. (Both Ohio and Pennsylvania have a fairly low college-going rate.) However, as jobs change, it is not at all clear whether this stereotype of the well-paid high school graduate will continue to motivate Pennsylvania youth toward staying in high school and not going on to college. Only during the 1950s could an under-educated man, working in a factory have two cars in the garage, three kids and a non-working wife.

Pennsylvania also has a relatively low percentage of children in poverty, as well as a low percentage of minority young people. In a state with a great deal of transiency, this information would not be as useful as it is in Pennsylvania, where today's youth *will* become tomorrow's Pennsylvania adults, due to the very small number of people entering and leaving the state. Although SAT scores need to be branded with a warning label as an index of school performance (in Pennsylvania only 58 percent of high school graduates take the test, leaving no performance data on the other 42 percent), the fact is that Pennsylvania students do reasonably well.

Funding for Pennsylvania schools has been consistently above the national average, a little more than the rate of per capita income is. Pennsylvania is about 22nd in per capita income, 17th in teacher salary and 11th in current expenditures per pupil. In general, the investment has paid off well. Pennsylvania is atypical in that local funding of education has increased as a percentage of total dollars,

PUBLIC SCHOOL ENROLLMENT TREND
FALL 1968 THROUGH FALL 1987



while in the nation, state funding is now the dominant component. However, there were 21,189 students who dropped out of school in 1986-87 (excluding Pittsburgh City Schools) of whom about a quarter left because they disliked school.

Although state tax capacity is increasing in general, there are many advantages to keeping the funding (and therefore the decision-making capacity) as close to individual schools as possible. States like Texas and Arkansas, faced with urgent school reform needs, elected to start at the top of state government, with consequences not entirely favorable. Arkansas, however, took many steps to get local government and education leaders involved in the efforts, a step which is now paying off in improved test scores. Pennsylvania, on the other hand, has always had a strong tradition of local school control and leadership, which may be one reason why its schools only need a tune-up rather than a major overhaul.

Private schools play a more important role in Pennsylvania than in other states. Almost 20 percent of Pennsylvania's students are in private schools, compared to about 12 percent for the nation. In addition, there are many public school systems that are so good in quality they rival private schools in almost any dimension. Shaker Heights, Ohio, to cite just one example, is a community with an excellent ethnic mix, with a high school faculty that could be teaching in most colleges without any additional preparation. (To be fair, Shaker Heights, like many Pennsylvania communities, is a mixed community by race, but not by social class. The poor have been left out. Much of what appears to be race is usually class. Places like Shaker Heights have been pioneers in showing that black and Hispanic middle-class kids can perform just like white middle-class kids. The next American adventure in equity, now taking shape in New Jersey, may involve *income* segregation, a much more complex and subtle set of issues.)

In this regard, a word needs to be said about the largest city school systems in the state—Philadelphia and Pittsburgh. Philadelphia and Pittsburgh rank in the top half of the 100 largest metropolitan areas in the nation in local government expenditures per capita for education. Both systems have excellent leadership in the superintendent, and widespread city support and commitment. Remember that there is a major size difference—Philadelphia city schools enrolled about 200,000 in 1984 and Pittsburgh only about 40,000.

Although the data is inadequate, it does appear that both are better than average for cities of their size in retaining youth to high school graduation. (Philadelphia graduated 15,154 in 1987, while Allegheny County, which includes Pittsburgh, graduated 15,760. However, private schools in Philadelphia graduated 5,836, while Allegheny graduated 1,954 private school students. The Philadelphia percentage of private to public school graduates is one of the highest in the nation.) It should also be pointed out that the enrollment totals for the two public school systems are only a small fraction of the state's two million student total. This large fraction of non-core city students, plus the very small percentage of rural poverty, may help to explain the overall high retention rate for the state.

PENNSYLVANIA HIGHER EDUCATION

When one thinks of the stars in the higher education firmament, Pennsylvania does well indeed. Ten percent of the nation's doctors were trained in Philadelphia medical schools, the world's first digital computer was developed at the University of Pennsylvania, Carnegie Mellon is world famous for artificial intelligence and robotics, plus the Department of Defense's Software Engineering Institute, Penn State is world famous for agronomic research and for providing services to the entire state, Swarthmore, Haverford and Bryn Mawr—the list of quality institutions is virtually endless. A city the size of Philadelphia with about 60 institutions of higher education, covering every conceivable educational area, is a blessed city indeed. Pittsburgh has about 32, with similar diversity of programs. But we need to look at the total higher educational system in Pennsylvania to see this diversity. (See page 9).

There are several ways in which Pennsylvania higher education is unusual, if not unique. Most states with a strong public and private higher education system find themselves fighting across the sectors with great frequency. This does not happen often in Pennsylvania, due in part to the Pennsylvania Association of Colleges and Universities, an organization that deals effectively with all segments of higher education. The Association and its Commission for Independent Colleges and Universities of Pennsylvania have been efficient, well-run and collaborative. (Most states have two associations, one for public institutions, another for private ones, and they often compete with each other.)

It is also relatively unusual for the private four-year institutions to have more students than the public four-year institutions. Perhaps even more important, prestige and status can be found in all aspects of the system. Carnegie Mellon, University of Pennsylvania, Penn State and Lehigh are quality institutions, but so are Swarthmore, Haverford, and the Community College of Philadelphia! (Community colleges are seldom given the prestige they deserve within their own states.) This perceived quality is the major reason for the large number of students who come to Pennsylvania to study each year.

It should also be noted that Pennsylvania higher education has only about half the percentage of minority students that are present in Pennsylvania high schools. This is certainly an issue that merits the attention of everyone in higher education. Although the numbers are not very good, it does seem that Hispanic populations are increasing in the state, while Asian populations are increasing as a percentage of college students. As in the country as a whole, blacks and Hispanics are under-represented in senior institutions and over-represented in community colleges. Of the 56,972 bachelor's degrees awarded in Pennsylvania in 1982-83, only 3,353 were awarded to minorities, 2,320 of those going to black students. Thus, 18 percent of public school students are

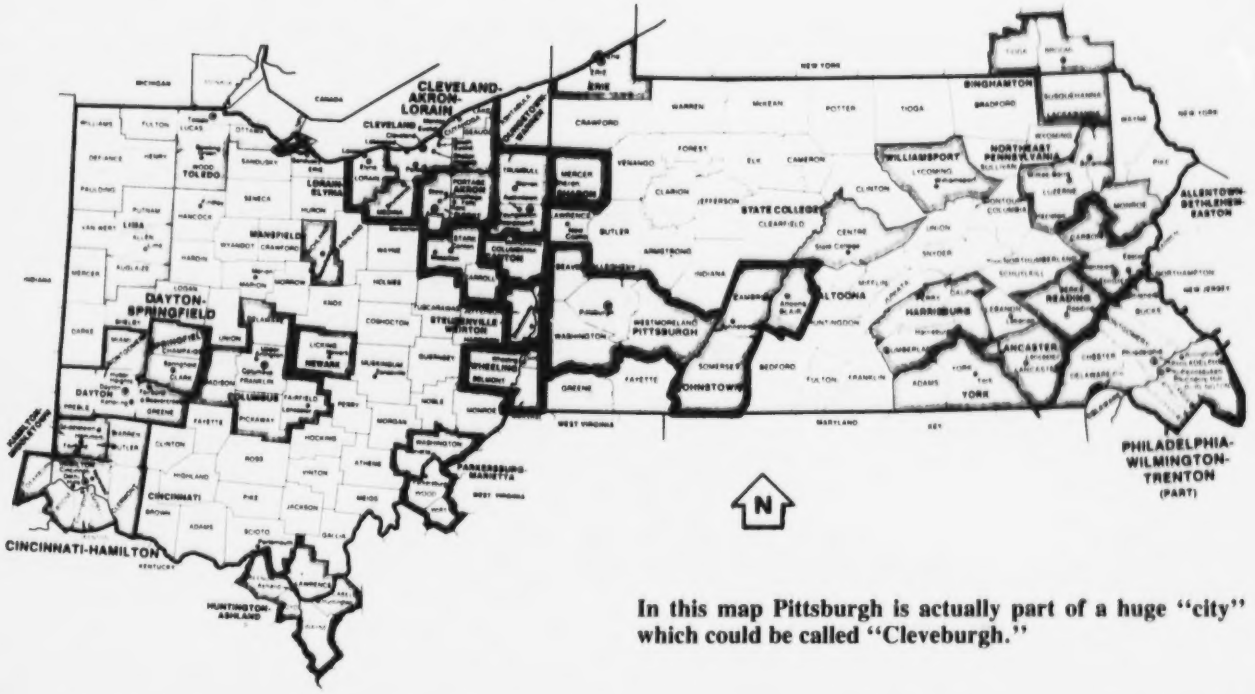
PENNSYLVANIA HIGHER EDUCATION PROFILE, 1986-87

Public 4-year institutions	**26**
Public 2-year institutions	**36**
Private 4-year institutions	**109**
Private 2-year institutions	**41**
Total	**212**
Vocational institutions	**396**
Full-time faculty, public institutions	**11,256**
Full-time faculty, private institutions	**9,328**
Enrollment, public 4-year institutions	**192,626**
public 2-year institutions	**111,564**
private 4-year institutions	**208,081**
private 2-year institutions	**33,652**
Percent minority students	**9.2% (U.S. 16%)**
State funds for higher education operations	**$1,176,066,000**
Residents who go out of state for college, 1986	**21,356**
Non-residents who come to Pennsylvania, 1986	**24,917**
Net migration	**+ 3,561**

minority, 9 percent of college students are minority and 5 percent of bachelor's degrees awarded go to minority students. (In 1982-83, 11 percent of bachelor's degrees in the U.S. went to minority students.) Today's Pennsylvania youth *will* become tomorrow's Pennsylvania voters, workers and consumers. That is as true for black, Hispanic and Asian youth as for Caucasian. Given the low fertility rates and small proportion of young people in the state, Pennsylvania cannot afford a single high school dropout! There are no surplus youth to be wasted in Pennsylvania.

The Pennsylvania system of higher education is mature, stable, consistently funded and difficult to change. Those in the system, faculty and students, are being well served. The problem is the number of people who are not in the system but should be. Because the minority populations in Pennsylvania will increase more slowly than in the nation, there is some time in Pennsylvania to develop a plan to ensure that every young person in the state can enhance their capacity through all levels of the educational system.

PITTSBURGH AND THE MONONGAHELA VALLEY



In this map Pittsburgh is actually part of a huge "city" which could be called "Cleveburgh."

The Pittsburgh metro area includes Allegheny, Fayette, Washington and Westmoreland Counties. Southwestern Pennsylvania would add Beaver, Butler, Greene, Somerset and Indiana Counties. There are parallels and contrasts here. For example, with population declines in most of the above, Indiana County grew 16 percent in the 1970's, due largely to the success of Indiana State University. We probably need to start our discussion by focussing first on Pittsburgh, the heart of the matter.

Pittsburgh is a very hilly place, producing some rather isolated residential areas, especially for the 70 percent of people in the metro who live outside of the city proper in places like Fox Chapel, Westmoreland County and Ligonier for the well-to-do, the middle classes of Monroeville and Mt. Lebanon, and the blue collar steelworker areas of Homestead, Aliquippa, Clairton and McKeesport. The Monongahela River carried the bituminous coal from neighboring towns (Washington, New Castle and Sharon, for example) to the Pittsburgh steel mills. In both coal and steel, undereducated men could support a family and own a home in good times; in bad times both not even approach their previous pay levels even if they could find jobs outside their fields. Because of the enormous dominance on these two fields in the Pittsburgh economy since World War II, the economic declines in coal and steel since the Fifties have cut deeper into Pittsburgh than any other American city except perhaps Detroit and the auto industry. Because of the spread of communities we have discussed, population declines occurred not only in the city of Pittsburgh, but in the metro area as well.

Pittsburgh had some major trump cards to play in combatting urban decline. First, the Mellon Family played a major role in the creation of the Allegheny Conference on Community Development in 1943. Phase One was an example of the wealthy of Pittsburgh working with government leaders like David Lawrence, deciding what to

do with the city. However, the events leading to and including Renaissance II were much more broadly participative and many factored, including one of the best inner city rehabilitation plans ever developed in America in the Sixties, the creation of new low income housing, the gleaming new skyscrapers of downtown, Three Rivers Stadium, Station Square, fine art museums and the superb Pittsburgh Symphony, especially under Steinberg and later Andre Previn, performing in Heinz Hall (yes, that was for H.J. Heinz of ketchup fame). Probably only in Pittsburgh and Chicago do you find this dedication among business leaders for the support and improvement of their city.

Pittsburgh is the 30th largest *city* with about 385,000 residents in 1987, but it is the 10th largest *metro* area with about 2,218,000 people. In most American cities suburbs grew at the expense of core cities, but in Pittsburgh, *both* declined simultaneously:

	1970	*1980*	*Net*
Pittsburgh Metro	2,401,362	2,263,894	– 5.7%
Pittsburgh core city	520,089	438,938	– 15.6%
Pittsburgh suburbs	1,881,273	1,839,056	– 2.2%

If either the core city or the suburbs decline, you can get along. When both are declining, there is economic trouble. Additionally, in Allegheny County, which includes Pittsburgh, the population has declined from 1,450,085 in 1980 to 1,398,142 in 1986. In addition, the average age in Allegheny is now *39* years, about five years over normal—28% of the population is over 55, while only 20 % is 1-16 years old. (Allegheny is also extremely dense, with a population of 2,000 people per square mile, twice the density of Japan.) The age problem is shared with the city, as we rank Pittsburgh with the other 99 largest metro areas:

Pittsburgh age:	0–15	94th	21.3%
	45–64	2nd	23.9%
	65+	8th	13.5%

This gives Pittsburgh a very old population. One can surmise that the 100,000 residents who left the metro from 1974 to 1984 (who were *all* from Allegheny) were younger workers. (Westmoreland and Fayette actually grew a little during the same time.) Pittsburgh lost 80,000 manufacturing jobs from 1975 to 1985, from 26% to 16% of the work force. These numbers may help to destroy another Pittsburgh myth—*everybody* worked in the mills. In 1975, only 9% of all Pittsburgh workers worked in steel mills; 4% do today. After primary metals one finds durable manufacturing—non-electrical machinery, fabricated machinery and electrical machinery in that order. However, all these manufacturing areas have also been vulnerable to major upheavals in the economy. Pittsburgh was next to last of the top 100 metro's in manufacturing employment growth since 1975. Largest employers in the sector are Westinghouse Electric with over 23,000 employees, USX with 10,000, and a number of companies around 2,500 workers, including Allegheny Ludlum Steel, LTV Steel, PPG Industries, and Alcoa.

In non-manufacturing, Pittsburgh showed some growth, but it was agonizingly slow. Many "showcase" projects, like Renaissance II, were not big enough to change the employment picture—Pittsburgh construction jobs only grew by 1,500 from 1975-85, for a 4% gain, while the nation's construction work force grew by *30%* and the Middle Atlantic region by 20% during the same decade. Although the growth rates were below the state and nation, Pittsburgh's business services sector (advertising to architecture to data processing to accounting services) grew the most, as did finance, insurance and real estate. Aside from local, state and federal government workers, the largest non-manufacturing employers at over 5,000 each are The University of Pittsburgh, Mellon Bank, U.S. Air, Giant Eagle Grocery Stores and the May Company (owners of Kaufmann's Department Stores). There is potential for further expansion of good jobs in the services sector, but these generally would not be practical alternatives for steel workers. The metro is very high in adults with a high school diploma—43% versus a 100 metro average of 35%, but it ranks *94th* in adults who have completed one or more years of college—26.9% of Pittsburghers versus 35% average for the 100 metroes.

Here is an anomaly—twelve public and twenty private institutions of higher education serving a metro that ranks 94th in citizens with some college experience! One wonders whether there is not some procedure to ensure that the major resource that is higher education in Pittsburgh can be applied more effectively to the citizens of that area.

It is important to realize that the spurt of major building begun in 1980 and resulting in PPG Place, One Oxford Center, One Mellon Bank Center, Fifth Avenue Plaza, C and G Tower and Liberty Center, had an important effect in bringing the city together. However, *commercial* construction has done much better than industrial construction, and it is not yet clear how the addition of 5.5 million square feet of office space to downtown Pittsburgh will help the unemployed steelworker.

The metro has great strengths and potential that need explicit mention. First, there is no better location for a transportation hub than Pittsburgh. Water, rail, air and highways still provide a remarkable network of resources, including an international airport with fifteen carriers represented (and airports do yield a lot of well-paying jobs), six major highways with eighty-three truck carriers and sixteen freight forwarding operations. Second, Pittsburgh is second only to New York and Chicago in terms of the total size of its corporate headquarters (measured in sales), and houses over 166 multi-national corporations. Third, Pittsburgh's economic woes have at least created reasonably low land costs and office and home prices. Fourth, Pittsburgh is clearly the financial capital of western Pennsylvania, and this fact has provided a measure of stability during the traumatic years. Further expansion of this role is limited, of course, by the financial presence of Philadelphia and New York. However, if the Pittsburgh econ-

omy begins to expand, financial services for Pittsburgh may be enough to fuel this sector. (The genius of Chicago banking was its dedication to improve Chicago. Indeed, many of the loans that created Detroit's auto business were signed with Chicago banks.) "Live where you work, and work where you live," may be the secret to the future success of Pittsburgh's financial infrastructure.

The major problems which confront Pittsburgh's future are already here. First, the dependence on steel industries is still far greater than is useful in a diversified economy. Although the remaining metals production companies seem "leaner and meaner" than in the past, and Alcoa's recent decision to stick with what they do best is highly commendable, metals production in the U.S. is: (a) moving closer to the areas in which the auto industry is concentrated, (b) joint venturing with international companies, as with the USX—South Korea efforts in California, (c) moving to new mini-mill facilities in the south and west, and (d) being "off-shored" completely to Asian and South American plants.

Second, relatively high energy costs, especially residential, will cut into the advantages of comparatively low housing costs. In addition, relatively high tax rates, caused by the large outmigration of taxpayers as well as the very large number of older persons receiving transfer payments, will serve as a disincentive. Third, the lack of young families just starting out, having their first child, working hard to move up to a better house, college education for their children, is a significant detriment to economic growth. The continuing outmigration of workers also appears to lose the better educated and better trained members of the work force.

THE MONONGAHELA VALLEY

A distinguished report from the Mon Valley Commission in February, 1987 promised a shimmering future for the area:

"The Valley of the future will have good roads linking its communities with each other, with the City of Pittsburgh, and with the interstate highway system. Along these roads will be new industrial parks and recreational areas, many of them near the rivers. The people attracted by new employment opportunities will live in renovated older homes or new homes, many with attractive river views.

Some people will work in Pittsburgh, commuting on the extended Busway or on new highways. When they get home they will be able to shop in local business districts for basic needs or in the malls for more extensive shopping. They will still live in Wall or Duquesne or McKeesport, but their local government will have consolidated some of its functions with other nearby communities for more efficient service.

Students will study in schools with modern equipment and innovative programs, and many will go on to college or into training programs. They will be able to find jobs close to home, possibly in the central distribution center or a new high tech firm, or even a specialty steel plant. . . ."

This section is quoted at length, because it presents a possible reality. This is not the typical "wish list," as the rivers, recreational areas, etc. are already there. The statement also reveals, through its aspirations, the massive problems of uncoordinated transportation, population declines, job declines, stagnant housing markets, increasing poverty and inefficient local government units with inadequate tax revenues to provide services. The report also contains specific actions to be taken, with the accountable agents specified and funding sources listed.

It is hard to imagine a group of talented public citizens doing a better job of planning their future. Yet, there is a note of unreality about the document, based on the single, overriding problem for which there is no solution—the creation of a massive number of new, *middle-income* jobs. Education does not create jobs (although the absence of education can certainly make jobs go away).

The Job Training Partnership Act is alive and well, but three different JTPA service delivery areas serve the Mon Valley, and none have head offices inside the Valley. The clients range from dislocated workers to chronically unemployed to minority youth to homemakers. Programs range from GED preparation to customized job training and apprenticeships. Service providers range from JTPA to community colleges, from vocational/technical schools to proprietary schools and companies themselves. These collections of clients, programs and providers are not well coordinated. In addition, as Thomas La Belle and Christopher Ward of the University of Pittsburgh point out, there is a lack of evidence on which programs generate which results. For example, is it true that on-the-job training temporarily subsidizes employers who let the workers go after the subsidy ends? There is no evidence on this kind of question. What jobs will be available in the Mon Valley over the next five years? Without this kind of information, job training will not be effective.

In addition, small business starts are vital to the job growth of the Valley. The "incubator" system proposed by the Commission as well as the Business Technical Assistance Center notion are good for starters, but they do not target areas of special opportunity for business development, particularly in services. A "marketing plan" could be developed to provide special rewards for new ventures that are most likely to succeed in the Mon Valley.

Until this issue is addressed, other problems will remain. For example, school enrollments will decline until younger workers, just starting their families, move into the Valley in order to work in newly created jobs that have advancement potential and pay enough to support a family. At the moment, about half of the Mon Valley school districts have fewer than 2,000 students (See page 15).

As La Belle and Ward point out, there is major variation in the districts in terms of their ability to generate revenues to operate their schools. Only a small number of districts (West Mifflin and West Jefferson Hills) have a secure revenue base. Some plan for district or program consolidation is needed, given the "downsizing" agenda the schools will have to deal with in the coming years. (Since 1980-81 every district has declined by at least 10 percent.) One of the best poverty indicators is the percentage of

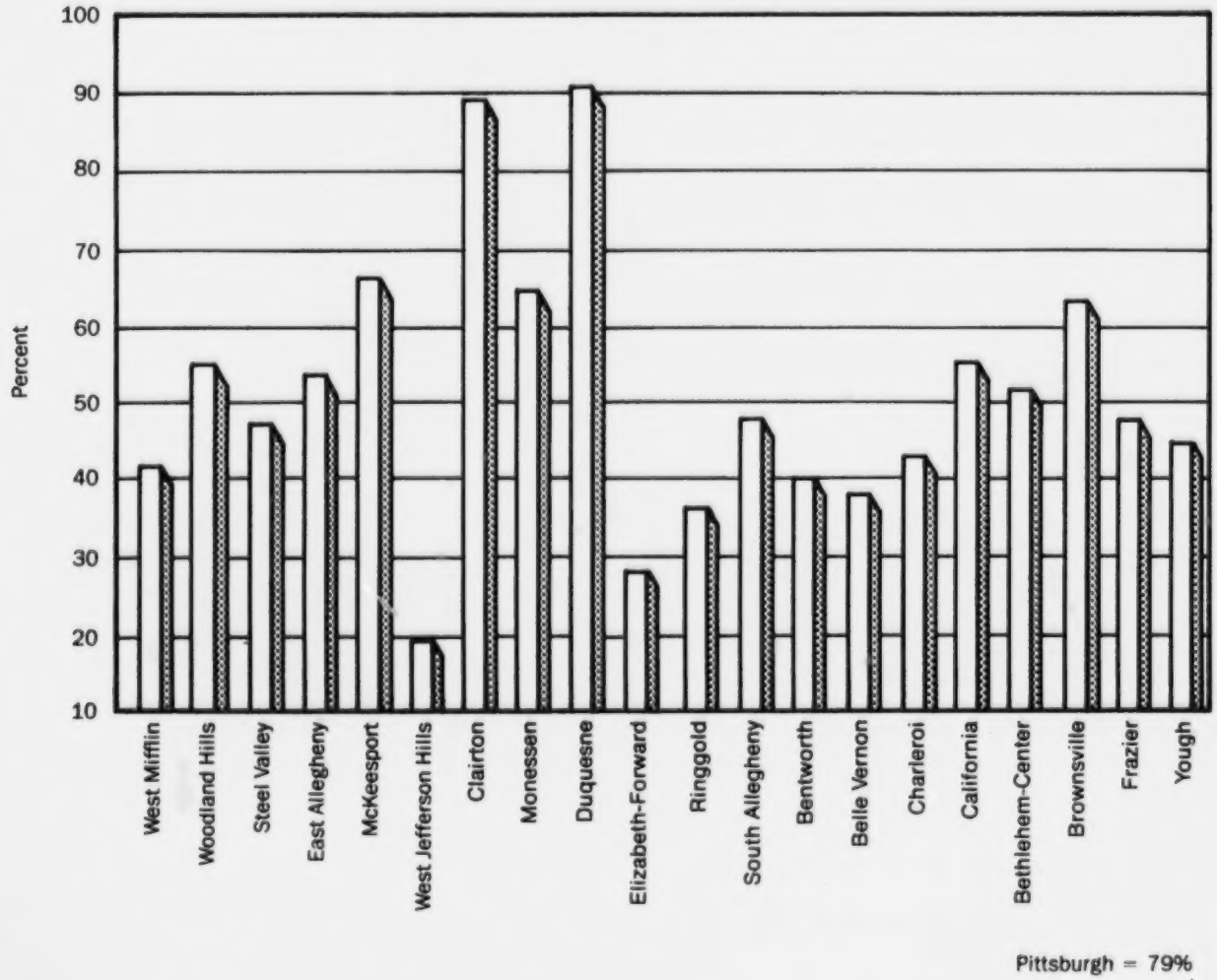
free lunches served by school districts. As the chart below shows, with the exception of West Jefferson Hills, every district has a serious problem of a near majority of children in poverty. (In Pittsburgh the free lunch percentage is 79%.)

With a high number and percentage of children in poverty, the importance of early childhood, Head Start-type programs, increases. Yet early childhood programs do not seem to be a major activity in the Valley. The same could be said of black-white relationships, another area that will need more attention in the years to come.

While schools cannot *create* jobs (except for teachers and staff), the showcasing of schools can suggest to prospective businesses that a lively, well-educated work force is being produced and will be ready if they move in. The University of Pittsburgh has led in this area, helping to create "Generations Together" and the classrooms of the future projects in Steel Valley. Other similar programs have demonstrated schools, universities and businesses working together. Such programs assist communities to sell themselves by putting their best feet forward. The Mon Valley Educational Consortium has begun some promising work in this area.

Downtown Pittsburgh, with all of its problems, nevertheless has its *symbols* of progress, particularly Renaissance II. These symbols of improvement are vital for every school district and job program in the Mon Valley. They can be the self-fulfilling prophecy that actually brings

NATIONAL SCHOOL LUNCH PROGRAM, 1986–87
PERCENT FREE LUNCHES OF TOTAL LUNCHES SERVED



Source: Pennsylvania Department of Education

Mon Valley District Enrollments, 1986-87	
Belle Vernon	3,069
Bentworth	1,437
Bethlehem-Center	1,835
Brownsville	2,892
California	1,315
Charleroi	1,899
Clairton	1,174
Duquesne	1,062
East Allegheny	2,090
Elizabeth Forward	3,238
Frazier	1,563
McKeesport	5,013
Monessen	1,094
Ringgold	4,048
South Allegheny	1,884
Steel Valley	2,051
West Jefferson Hills	2,711
West Mifflin	3,169
Woodland Hills	6,531
Yough	2,885
Mon Valley Catholic Schools	4,278

in new businesses and jobs. All of Pittsburgh's institutions of higher education should become involved in this way, for their own good as well as the Valley's.

Because of the urgent need for diversification in the Mon Valley economy, success will mean a number of imports and newly formed businesses that represent the first time a business of that sort has ventured into the Valley. (This is contrary to most business development in America, as clusters of similar businesses nest along the suburban growth corridors whose core is interstate highways. Businesses will normally contact other similar businesses in an area to find out what "it's really like.") Some conscious strategy must develop that will encourage and reward *the first new venture in each business area that diversifies the economy of the Valley*. A small number of successes, particularly in the hardest hit areas outside of Pittsburgh which do not have symbols of progress of their own, may be the most viable opening wedge into the Valley's problems.

Finally, the Valley is not enough of an entity. Partly due to hilly geography, leading to poor roads, there is a great deal of separatism in the Valley. Although the Mon Valley Education Consortium and the Commission have understood the necessities of interdependence and collaboration, these values are not always found at the local level. At the same time, demographics suggest the emergence of a new entity which could be called "Cleveburgh"—a single area of high population density stretching from Cleveland through Pittsburgh and Altoona to State College. (See map on page eleven).

There are many opportunities for the Mon Valley in seeing itself as part of this larger economic and political entity. Metro expansions often cross state lines—the second largest metro in Illinois is now St. Louis, and the largest metro in Arkansas is Memphis. Interstate compacts can work effectively to exploit these opportunities.

PITTSBURGH AND THE MON VALLEY—SUMMARY AND CONCLUSIONS

During the Fifties, a man with less than average education in Pittsburgh could have two cars in the garage, raise three children, sending some of them to college, and have a non-working wife who was a full-time homemaker. The Pittsburgh mill or factory worker represented the highest standard of living ever attained for factory workers. It is clear that we will never see this era again. Today, two incomes are a virtual necessity for a middle-class life.

Although Pittsburgh has many symbols of success today (and they *are* important), a good guess is that 79% of the kids in Pittsburgh schools are below the poverty line. As one leaves the city and moves out into the Mon Valley, one sees even more visible signs of poverty without the contrasting signs of progress. There is a dazed look in the faces of many displaced workers whose dreams, for themselves and their children, seem dashed to the ground. People do not know what to do. The geography of the Valley—high hills and poor roads—has made communication and sharing across small towns very difficult. Pittsburgh and the Valley have a large elderly population (eighth largest among the 100 biggest metros), and a very small youth population (*94th*).

Job growth has been even more difficult for Pittsburgh and the Valley than for Pennsylvania as a whole. Yet there is no doubt that many citizens have wrestled diligently with the problems, and have applied some good strategic planning. The problems just happen to be very intractable. The major one is a continuing dependence on steel and related industries, affecting the City and the Valley both. Related is the great difficulty of generating new middle income jobs and the new businesses that will create them. From these two come others—low school enrollments, poorly funded communities, no new roads being built, etc. What follows are some suggested alternatives.

1. The excellent system of higher education in Pittsburgh needs to work together with school systems to "showcase" the schools as exciting places where important skills are learned, for a wide variety of work settings and (equally important) for adult life itself. This is not only to attract new businesses to the City and Valley but also to increase morale and a feeling of achievement in communities.
2. With a high percentage of children in poverty, more attention needs to be focussed on early childhood programs than is the case at present. While retraining the existing work force is an important task, it seems to have become the *only* task in some people's minds. To neglect the youngest generation is to commit the error over again.
3. The same can be said of race relations, which needs to be a more specific focus of school programs and collaborative activity. Just as businesses need diversification to achieve a stable yet growing economy, social strategies need the same diversification for the same reasons.
4. Some consolidation of school districts and programs will become necessary in the near future. This should be done provisionally when possible, as the economy may rebound to the point that districts may become viable again, in both students and revenues.
5. Jobs programs, as in many areas, are not coordinated well in terms of clients, programs and providers. There may have to be a point person in each community who can do this.
6. The first new business in an area like computer services is the hardest one to get. In each county if not community, a strategy needs to be developed to attract the first one and make sure that it succeeds.This includes the creation of new businesses as well as the importation of existing ones. The first new business of a given type need not be big . . . but it had better be good enough to succeed. This "cloud seeding" strategy can be cost effective and has a snowball effect built in.
7. Although the City and the Valley work together in many ways, there are other opportunities to develop reciprocal programs that have not yet been created. In addition, the "Cleveburgh" metropolitan area does have demographic reality and suggests some notions about interstate compacts that could be useful to all. With imaginative leadership, which already exists in the City and Valley, and a *sense of optimism*, the long term success of the area can be achieved. But it is a journey taken one step at a time.

SOURCES USED IN PREPARING THIS REPORT:

1. *Minorities in Higher Education* (Washington, D.C.: The American Council on Education, 1986).

2. *The Education of Hispanics: Selected Statistics* (Washington, D.C.: The National Council of La Raza, 1986).

3. *Education Vital Signs* (Alexandria, VA.: The National School Boards Association, 1986).

4. *The Condition of Education, 1988* (Washington, D.C.: National Center for Educational Statistics, 1987).

5. *All One System*, Harold L. Hodgkinson (Washington, D.C.: The Institute for Educational Leadership, Inc., 1985).

6. *Higher Education: Diversity is Our Middle Name*, Harold L. Hodgkinson (Washington, D.C.: National Institute for Independent Colleges and Universities, 1986).

7. *The Changing Profile of Mexican America* (Los Angeles, CA: The Tomas Rivera Center, 1985).

8. *State Demographics*, by the Editors of *American Demographics* (Homewood, IL: Dow Jones-Irwin, 1983).

9. *Digest of Educational Statistics, 1987* (Washington, D.C.: National Center for Educational Statistics, 1987).

10. *California: The State and Its Educational System*, and *Texas: The State and Its Educational System*, Harold L. Hodgkinson (Washington, D.C.: Institute for Educational Leadership, Inc., 1986). Plus reports on Delaware, Indiana, Kentucky, Michigan, New York, and Ohio.

11. *1986–87 Fact Book on Higher Education* (Washington, D.C.: The American Council on Education, 1987).

12. *Statistical Abstract of the United States, 1988* (Washington, D.C.: U.S. Government Printing Office, 1988).

13. *Occupational Outlook Quarterly* (Washington, D.C.: U.S. Department of Labor, 1986).

14. *Population Profile of the United States* (Washington, D.C.: Bureau of the Census, No. 150, pp. 23, April, 1987).

15. *Book of America*, Neal Peirce and Jerry Hagstrom (New York, NY: Warner Books, 1984).

16. *The Payoffs of Education for Pennsylvania Workers: How to Sustain Economic Development*. Gordon F. De Jong and Gretchen T. Cornwell. Population Issues Research Center, Pennsylvania State University, June, 1988.

17. *Report to the Allegheny County Board of Commissioners for the Economic Revitalization of the Monongahela, Youghiogheny and Turtle Creek Valleys*. Mon Valley Commission, February 1987.

18. *Education and Job Training in the Mon Valley*. Thomas J. La Belle and Christopher Ward. School of Education, University of Pittsburgh, May, 1988.

19. *A Summary of Enrollments in Public Schools in Pennsylvania*. Pennsylvania Department of Education, April, 1988.

20. *Public and Nonpublic High School Graduates, 1987*. Pennsylvania Department of Education, July, 1988.

21. *Public School Dropout Report, 1986–87*. Pennsylvania Department of Education, July, 1988.

22. *Public School Professional Personnel, 1987–88*. Pennsylvania Department of Education, April, 1988.

PENNSYLVANIA—SUMMARY AND CONCLUSIONS

Even though Pennsylvania has slipped from fourth to fifth largest in size, its 11.9 million people, its natural and economic resources, its incomplete conversion from a manufacturing to a diversified economy, make it a state to be reckoned with. In addition to a major conversion from a dependency on metals production and fabrication, the state has a very old population, and a very low birth rate. (It is second in elderly and 48th in children.) Although its black population is over a million, the *percentage* of blacks and other minorities is low due to the large size of the state's total population. Its great stability comes from being 50th in residents who were born in another state. Today's Pennsylvania youth *are* the state's future, given the small numbers moving in and out. The state has a comparatively low crime rate, although the number of prisoners has increased 86% since 1980, well above the national average.

What the state does *not* have is a large number of young families just beginning to have children. In addition, it is short on two-income families, almost a prerequisite for middle-class membership today. Pennsylvania's prison population will increase proportionately faster than the school age population, and prisoners are about seven times more expensive than school children or college students—it's seven times more expensive to have someone in the state pen than it is to have someone at Penn State. What if Pennsylvania could invest as much in each school child as it does in each prisoner (about $22,000 for the U.S.)?

The state has added 239,000 new jobs during the 1980's although it is not clear how much these new jobs pay. There is good reason to think that many pay very poorly and many pay quite well, leaving a smaller number of new jobs in the mid-range.

Pennsylvania's schools do extremely well in retaining youth to high school graduation, as do Ohio and New Jersey. (Why similar states, like Florida, New York, Texas and California do so poorly is not clear.) Although total enrollments are going down, an increase has turned up in the early years of school and will work its way through the system. Private schools enroll almost 20% of Pennsylvania's youth, far higher than the national average of 12%. Pennsylvania has fewer children below the poverty line than the national average of 15.3%, which may be another clue to the high retention figure. Minorities constitute 16% of all public school students in 1987, about half the percentage of the nation as a whole.

The Pennsylvania system of higher education is marked by richness and diversity, both in public and private institutions. This "balance of power" seems to work in everyone's best interest. One major problem is the small number of minorities, as well as Caucasians, who go on to higher education in Pennsylvania.

In general, Pennsylvania education is doing a number of things right. Investments in the system have been high, and the investment seems to pay off, except for minorities. The state needs to do several things: (1) Attract younger workers, just starting families, with the offer of well-paying *new* jobs that have promotional possibilities; (2) Attract an increasingly diverse business sector, both through imports and new small businesses started by Pennsylvanians themselves. Incidentally, Philadelphia ranks as one of the ten metros with the largest number of black businesses, and 27% of the black population in Philadelphia lives in the suburbs; (3) Increase the fraction of high school graduates in the state who go on to further education; (4) Expand the consideration of minorities to include a rapidly increasing Hispanic population, as well as a number of different Asian nationalities moving into Pennsylvania. (Black populations are stabilizing and may begin to decline shortly); (5) Increase the effective interaction of all levels of the Pennsylvania educational system so that more informed decisions can be made about the whole. Information is not currently available about student progress through the system, kindergarten through graduate school. We need to see the entire pipeline.